```
Dh
         121 CGAGAACCAGACCATTCAGGAACTCTGATCGTGGACATTTCAACCTCCAGAACTGTGATC 180
Qy
                                            CATATCAACCTCCAGAACTGTGATC 179
Db
         181 CAAAATGCATATGTATCT
                                           AAGTAAAGGCCGGAATATTCTTTGTTT 240
Qу
            Db.
         178 CAAAATGCATATGTATCTTT
                                     ACTCTGAAGTAAAGGCCGGAATATTCTTTGTTT 119
                                      ÇATCAAGCAAGAAGTTTCCTGGCAATAAACTA 300
Qy
         241 AAAACATTAAAAAACAAAAC
                                     1784 -----
             Db
         118 AAAACATTAAAA
                                         CAAGCAAGAAGTTTCCTGGCAATAAACTA 59
                     TYPATTTTTAAGGAACACAAA KAAAGTGTTCAACCTGTGGCAAATTTGT 358
Qy
         Db
RESULT 4
ABN96147/c
    ABN96147 standard; DNA; 176 BP.
ID
XX
AC
    ABN96147;
XX
DT
    13-AUG-2002 (first entry)
XX
DF.
    Gene #2645 used to diagnose liver cancer.
XX
KW
    Gene; liver cancer; ds; hepatocellular carcinoma; hepatotropic;
    metastatic liver tumour; cytostatic; expression profile; disease state;
KW
KW
    disease progression; drug toxicity; drug efficacy; drug metabolism.
XX
os
    Homo sapiens.
XX
PN
    WO200229103-A2.
XX
    11-APR-2002.
PD
XX
PF
    02-OCT-2001; 2001WO-US030589.
XX
PR
    02-OCT-2000; 2000US-0237054P.
XX
    (GENE-) GENE LOGIC INC.
PA
XX
PΙ
    Horne D, Alvares C, Peres-Da-Silva S, Vockley JG;
XX
DR
    WPI; 2002-426119/45.
XX
    Diagnosing and detecting the progression of liver cancer, hepatocellular
PT
PT
    carcinoma or metastatic liver tumor in a patient, involves detecting the
PT
    level of expression of two or more genes in a liver tissue sample.
XX
PS
    Claim 1; SEQ ID NO 2645; 298pp; English.
XX
CC
    The invention relates to a novel method for diagnosing and detecting the
CC
    progression of liver cancer, hepatocellular carcinoma or metastatic liver
CC
    tumour in a patient, and differentiating metastatic liver cancer from
CC
    hepatocellular carcinoma in a patient, involving detecting the level of
CC
    expression of two or more genes represented in ABN93503-ABN97455 in a
CC
    tissue sample. The method of the invention has hepatotropic, and
    cytostatic activity. The method is useful for diagnosing and detecting
CC
CC
    the progression of liver cancer, hepatocellular carcinoma and metastatic
CC
    liver carcinoma in a patient. The method is useful for identifying
CC
    expression profiles which serve as useful diagnostic markers as well as
CC
    markers that can be used to monitor disease states, disease progression,
CC
    drug toxicity, drug efficacy and drug metabolism. Note: The sequence data
    for this patent did not form part of the printed specification, but was
CC
CC
    obtained in electronic format directly from WIPO at
CC
    ftp.wipo.int/pub/published_pct_sequences
XX
    Sequence 176 BP; 54 A; 23 C; 23 G; 75 T; 0 U; 1 Other;
  Query Match
                        30.7%; Score 148.4; DB 6; Length 176;
```

95.6%; Pred. No. 1.6e-17;

Best Local Similarity

```
0; Mismatches
                                                          7; Indels
                                                                             Gaps
                                                                                        0:
  Matches 152; Conservative
           310 TTATTTTTTAAGGAACACAAATTAAGTGTTCAACCTGTGGCAAATTTGTACTTTĆTCCCT 369
Qу
                176 TTATTTTTTAAGGAACACAAATTAAGTGTTCAACCTGTGGCAAATTTGTACTTTCTCCCT 117
Db
           370 GAATTATGTTGTTATCAAAGAAAAAATTGGGAAGCATGGCAAAATATCATCAAAACTGA 429
Qy
                116 GAATTATGTTGTTATCAAAGAAAAAATTGGGAAGCATGGCAAAATATCATCAAAACTGA 57
Db
           Qv
                56 AACTAGAATTAAACANAACTAAATTAAAATGAAATAAAA 18
Db
RESULT 5
ABL33696Xc
     ABL $3696
                ętandard; DNA; 6668 BP.
ID
XX
     ABL3$6$6;
AC
XX
     26-MAR-2002
                     (first entry)
DT
XX
                    system associated gene SEQ ID/NO: 1669.
      Human immune
DE
XX
                     system disease; cytosine methy/ation; antiasthmatic;
      Human; immune
KW
      antiarteriosclerotic; antianaemic; cytostatic; nootropic;
ΚW
     neuroprotective; anti-HIV; anticonvulsant; ophthalmological; antirheumatic; antiarthritic; antidiabetic; antipsoriatic;
KW
KW
     antirneumatic; antiarinfilic; antiquadeutg; antipsorfatic; antiinflammatory; cancer; eye disease; arteriosclerosis; anaemia; acute myeloid leukaemia; Alzheimer's disease; AIDS; epilepsy; neurofibromatosis; rheumatoid arthritis; psoriasis; bowel disease; gene;
KW
KW
KW
KW
      ds.
XX
os
      Homo sapiens.
XX
      WO200200928-A2.
PN
XX
      03-JAN-2002.
PD
XX
      02-JUL-2001; 2001WO-EP0075
ΡF
XX
      30-JUN-2000; 2000DE-01032529
PR
      01-SEP-2000; 2000DE-01043826
PR
XX
PA
      (EPIG-) EPIGENOMICS AG.
XX
      Olek A, Piepenbrock C,
                                   Berl
XX
      WPI; 2002-130909/17.
DR
XX
      Nucleic acid comprising fragment of hemically modified gene, useful for diagnosis and treatment of diseases associated with abnormal cytosine
PT
PT
PT
      methylation.
XX
      Claim 1; SEQ ID NO 1669; 32pp + Sequence Visting; German.
PS
      The present invention provides a number of human immune system associated
CC
      genes which are modified by the methylation of cytosines. The sequences
CC
      can be used in the diagnosis and treatment of immune system disorders,
      including eye diseases such as retinopathy, neovascular glaucoma and macular degeneration, a teriosclerosis, anaemia, cancer, acute myeloid
CC
CC
      leukaemia, Alzheimer's disease, AIDS, epilepsy, neurofibromatosis, rheumatoid arthritis, sociasis and inflammatory ulcerative bowel diseases. The present sequence is a gene of the invention
CC
CC
      Sequence 6668 BP; 16/8 A; 328 C; 1974 G; 2737 T; 0 U; 1 Other;
                                                               Length 6668;
                               15.2%; Score 73.4; DB 6;
   Query Match
   Best Local Similarity / 51.7%; Pred. No. 0.00041; Matches 167; Conservative 0; Mismatches 156
                                      0; Mismatches 156;
                                                                Indels
            162 AACCTCCAÇAACTGTGATCCAAAATGCATATGTATCTTTGGAAGAAACTCTGAAGTAAAG 221
 Qу
                 111 | 1/1/1 | 1 - 1111 | 1111 | 1
                                                                   -11
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